

Message Text

CONFIDENTIAL

PAGE 01 STATE 189692
ORIGIN ACDA-10

INFO OCT-01 SS-14 ISO-00 OES-02 EB-04 EA-06 NSCE-00
DOE-01 SOE-01 PM-03 INR-05 INRE-00 SSO-00 /047 R

DRAFTED BY ACDA/NP/NX:KMCMANUS
APPROVED BY ACDA/NP:RWILLIAMSON
OES:DCOOPER
COMMERCE:JNELSON (INFO)
-----101757 271910Z /44S

O 271631Z JUL 78
FM SECSTATE WASHDC
TO AMEMBASSY TAIPEI IMMEDIATE

C O N F I D E N T I A L STATE 189692

LIMDIS; PASS URGENTLY TO ACDA EMPLOYEE JOERG MENZEL

E.O. 11652: GDS

TAGS: MUNC, TW

SUBJECT: ZIRCONIUM EXPORT TO TAIWAN

REFS: (A) TAIPEI 4815;
(B) COMMERCE LICENSES 263128, 281286, 297855

1. FOLLOWING INFORMATION WAS REQUESTED REFTEL A. ALL THREE
COMMERCE CASES (REF B) HAVE CHINESE GOVERNMENT PROCUREMENT
AND SERVICES MISSION AS PURCHASOR, AND INER AS ULTIMATE
CONSIGNEE. ALL HAVE CERTIFICATION FROM INER AS ULTIMATE
CONSIGNEE AND ARE ACTUAL ORDERS, NOT MERELY INQUIRIES. ALL
LICENSES HAVE BEEN APPROVED.

2. COMMERCE LICENSE 263128 -- APPLICATION DATE JUNE 1977
FROM TELEDYNE TO EXPORT 700 LBS. OF ZIRCALLOY WITH TOTAL
VALUE OF \$24,100. MATERIAL IS IN THE FOLLOWING FORM:
CONFIDENTIAL

CONFIDENTIAL

PAGE 02 STATE 189692

(A) WIRE - 4 LBS. ZIRC-2

(B) ROD (2 FT. LENGTH, DIAMETER RANGE FROM .25 TO .55)
-- - 60 LBS. PURE ZIRCONIUM
-- - .50 LBS. ZIRC-2
-- - .50 LBS. ZIRC-4

(C) PLATE (WIDTH 4 INCHES, LENGTH 1 FOOT, THICKNESS RANGE
-- FROM 1/16 INCH TO 3/32 INCH)

-- - 20 LBS. PURE ZIRCONIUM
-- - 100 LBS. ZIRC-2
-- - 100 LBS. ZIRC-4

(D) STRIP (WIDTH 2 INCHES, THICKNESS .02 INCH)

-- - 20 LBS. ZIRC-2
-- - 20 LBS. ZIRC-4

CERTIFICATION OF ULTIMATE CONSIGNEE SIGNED BY METALLURGIST
IN UNIDENTIFIED SECTION OF INER. SPECIFIC END USE STATED
WAS: "THIS MATERIAL WILL BE USED FOR TEST SAMPLES FOR THE
FUNDAMENTAL STUDY ON MECHANICAL AND PHYSICAL PROPERTIES
OF ZIRCALLOY UNDER THE SUBJECTS LIKE 'CORROSION AND
HYDROGEN PICK UP OF ZIRCALLOY IN HIGH TEMPERATURE WATER,'
'CONTROL OF HYDRIDE ORIENTATION IN ZIRCALLOY'; ETC." IN
ANSWER TO QUESTION OF WHETHER THE R&D WAS NUCLEAR RELATED,
APPLICANT STATED: "IN A WAY, YES...ALTHOUGH SOME OF THE
PROPERTIES OF ZIRCALOYS HAVE ALREADY BEEN WELL STUDIED AND
RESULTS PUBLISHED BY OTHERS, WE WOULD STILL LIKE TO
REPEAT THE STUDY AND EXPERIMENT IN ORDER TO FAMILIARISE
OUR STAFF WITH THE FUNDAMENTAL KNOWLEDGE AND TO ESTABLISH
CONFIDENTIAL

CONFIDENTIAL

PAGE 03 STATE 189692

THEIR RESEARCH ABILITY BY COMPARING OUR EXPERIMENTAL
DATA WITH THE PUBLISHED ONES." LICENSE WAS APPROVED
JUNE 22, 1978.

3. COMMERCE LICNESE 281286 -- APPLICATION DATE OCTOBER
1977 FROM TELEDYNE TO EXPORT 2,005 LBS. ZIRCALLOY -- 4 IN
THE FORMS OF STRIP, ROD AND WIRE WITH A VALUE OF \$54,116.
MATERIAL WAS IN THE FOLLOWING FORM:

(A) STRIP (WIDTH APPROXIMATELY 3.94 INCHES, THICKNESS
-- .064 INCHES, LENGTH 78.74 INCHES)

-- - 250 PIECES, APPROXIMATELY 1180 LBS. ZIRC-4

(B) ROD (78.74 INCHES LENGTH, DIAMETER .65)

-- - 100 PIECES APPROXIMATELY 620 LBS. ZIRC-4

(C) WIRE - 500 FT. APPROXIMATELY 2.5 LBS. ZIRC-4

END USE STATEMENT SIGNED BY N.N. HSU, DIVISION
DIRECTOR OF ADVANCED NUCLEAR FUEL DIVISION, INER STATES

MATERIAL WILL BE USED FOR: (QUOTE)

-- RESEARCH AND DEVELOPMENT OF THERMAL REACTOR FUEL PINS AND BUNDLES;

-- TESTING OF THE PROPERTIES OF ZIRCALOY MATERIALS, BEFORE AND AFTER IRRADIATION, SUCH AS TENSILE STRENGTH, COMPRESS STRENGTH, YIELDING POINT, CORROSION, MECHANICAL PROCESSING, AND METALLURGICAL SAMPLES PREPARATION;

-- CHEMICAL COMPOSITION ANALYSIS SUCH AS ZIRCONIUM CONTENT AND IMPURITIES CONTENT;

-- NONDESTRUCTIVE TESTING SUCH AS FOR MANUFACTURING OF CONFIDENTIAL

CONFIDENTIAL

PAGE 04 STATE 189692

REFERENCE STANDARDS FOR ULTRASONIC TESTING, EDDY CURRENT TESTING AND RADIOGRAPHIC TESTING; AND

-- TECHNICAL TRAINING AND EDUCATION SUCH AS IN WELDING, BRAZING, NONDESTRUCTIVE TESTING, SAMPLING AND MOCK-UP.
(END QUOTE)

LICENSE WAS APPROVED JUNE 27, 1978.

4. COMMERCE LICENSE 297855 -- APPLICATION DATE FEBRUARY 9, 1978 FROM GENERAL AEROSPACE MATERIALS CORP. TO EXPORT 1000 PIECES OF ZIRCALLOY-4 TUBING EACH PIECE 6.56 FT. LENGTH WITH THE CONTENT ZIRCONIUM 97.7 PERCENT AND HAFNIUM .016 PERCENT AND A VALUE OF \$59,368. INTERIOR DIAMETER APPROXIMATELY .4827 INCHES, WALL THICKNESS APPROXIMATELY .016 INCHES. END USE STATEMENT SIGNED BY N.N. HSU, INER STATES
END USE AS: (QUOTE)

-- USE FOR THE RESEARCH AND DEVELOPMENT OF THE THERMAL REACTOR FUEL CLADING.

-- USE FOR THE TESTING OF THE PROPERTIES OF THE ZIRCALOY MATERIALS, SUCH AS, TENSILE STRENGTH, COMPRESS STRENGTH, YIELDING POINT, CORROSION, MECHANICAL PROCESSING, WELDING, BRAZING, AND METALLURGIC SAMPLE PREPARATION.

-- CHEMICAL COMPOSITION ANALYS (SIC), SUCH AS, ZIRCONIUM CONTENTS AND INPURITIES CONTENT.

-- USE FOR NON-DESTRUCTIVE TEST, SUCH AS, TO MANUFACTURE THE REFERENCE STANDARDS FOR ULTRASONIC TESTING, EDDY CURRENT TESTING, AND DIOGRAPHIC TESTING.

CONFIDENTIAL

CONFIDENTIAL

PAGE 05 STATE 189692

-- USE FOR TECHNIQUE (SIC) TRAINING AND EDUCATION, SUCH AS, TRAINING AIDS, WELDING, BRAZING, NONDESTRUCTIVE TESTING, SAMPLES, METALGRAPHY, CORROSION, TEST PIECES, AND MAKE UP. (END QUOTE)

LICENSE WAS APPROVED JUNE 23, 1978.

5. ACCORDING TO DEPARTMENT OF COMMERCE FILES THERE HAVE BEEN NO OTHER LICENSE APPLICATIONS FOR ZIRCALOY TO INER SINCE JANUARY 1, 1978 AND ONLY TWO REQUESTS DURING THIS PERIOD FOR VERY MINOR QUANTITIES OF POWDER AND 25 LBS. OF TUBES TO CHUNG SHEN AND SUNROX CORPORATION, RESPECTIVELY.

6. IT IS IMPORTANT TO NOTE THAT ABOVE INFORMATION WAS TAKEN FROM COMMERCE LICENSE APPLICATIONS AND MUST BE TREATED AS "BUSINESS CONFIDENTIAL." CHRISTOPHER

NOTE BY OC/T: DISTRIBUTION CO-ORDINATED WITH S/S-O MR. SCOTT

CONFIDENTIAL

NNN

Message Attributes

Automatic Decaptioning: Z
Capture Date: 01 jan 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: DATA, ZIRCONIUM, EXPORT LICENSES
Control Number: n/a
Copy: SINGLE
Draft Date: 27 jul 1978
Decaption Date: 20 Mar 2014
Decaption Note: 25 YEAR REVIEW
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 20 Mar 2014
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978STATE189692
Document Source: CORE
Document Unique ID: 00
Drafter: KMCMANUS
Enclosure: n/a
Executive Order: GS
Errors: N/A
Expiration:
Film Number: D780308-0908
Format: TEL
From: STATE
Handling Restrictions:
Image Path:
ISecure: 1
Legacy Key: link1978/newtext/t19780713/aaaaakvj.tel
Line Count: 194
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: d928d76b-c288-dd11-92da-001cc4696bcc
Office: ORIGIN ACDA
Original Classification: CONFIDENTIAL
Original Handling Restrictions: LIMDIS
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 4
Previous Channel Indicators: n/a
Previous Classification: CONFIDENTIAL
Previous Handling Restrictions: LIMDIS
Reference: 78 TAIPEI 4815
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 04 aug 2005
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 1865316
Secure: OPEN
Status: NATIVE
Subject: ZIRCONIUM EXPORT TO TAIWAN
TAGS: MNUC, TW
To: TAIPEI
Type: TE
vdkgvwkey: odb://SAS/SAS.dbo.SAS_Docs/d928d76b-c288-dd11-92da-001cc4696bcc
Review Markings:
Sheryl P. Walter
Declassified/Released
US Department of State
EO Systematic Review
20 Mar 2014
Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014